# Patent Application of Aaron Faygenov for Bottle Cap Puncturing Device

### **Back Ground Field of Invention**

The invention of this application relates to water coolers into which water bottles are placed with their neck and opening facing down. The invention of this application offers a device that can be manufactured as a part of the water cooler or as an independent part that can be placed on the water cooler. Water bottles intended to be used with water coolers are usually supplied full with water and caped with a plastic cap. The invention of this application offers a device with a vertical spear head shaped part placed in a water cooler that punctures the cap on the bottle when the bottle is placed neck down on the water cooler, allowing water to flow into the water cooler.

### **Back Ground of Prior Art**

The inventor of this application could not find any device that is intended to puncture a standard water bottle cap for water coolers.

## **Objects and Advantages**

Currently, when placing a water bottle on a water cooler, the consumer has to remove the plastic cap off the bottle, invert the bottle with the bottle neck facing down, and place the bottle on the water cooler. In the process, due to the inversion of the water bottle without the cap, water splatters all over and around the water cooler. This is a major inconvenience. The object of this invention is to offer a device that allows the consumer to place a water bottle on a water cooler without having to remove the cap off its neck. When a bottle is placed on the water cooler, the cap puncturing device of this application punctures the bottle's cap, and allows water to flow into the water cooler. The advantage of the invention of this application is that it allows placing a bottle on a water cooler without any water splattering on the cooler and the area around it. The device of this application can be built as an integral part of a water cooler or as an independent article that can be easily attached to a water cooler. It is inexpensive to manufacture, very easy to install, and easy to use.

### **Drawing Figures**

Figure 1 shows the first preferred embodiment of the bottle cap puncturing device of this application.

Figure 2 shows the second preferred embodiment of the bottle cap puncturing device of this application.

# **Reference Numerals in Drawings**

- 10 rim
- 20 arch
- 30 pin
- 40 base
- 50 hole
- 60 adhesive tape

# Description Figures 1 and 2

Figure 1 shows a three dimensional drawing of the first preferred embodiment of the bottle cap puncturing device of this application

Figure 2 shows a three dimensional drawing of the second preferred embodiment of the bottle cap puncturing device of this application.

# Operation Figures 1 and 2

Figure 1: Rim(10) is placed on the edge of the water cooler's bottle receptacle hole using adhesive tape(60) to attach rim(10) to the edge. Arch(20) is suspended in the bottle receptacle hole with the pin(30) standing vertically. When a water bottle with its cap caped is placed neck facing down into the water cooler's bottle receptacle hole, pin(30) punctures the cap and water flows into the water cooler.

Figure 2: Base(40) is placed and attached to the base of the water cooler's bottle receptacle hole by adhesive tape(30) with pin(30) standing vertically. When a water bottle with its cap caped is placed neck facing down into the water cooler's bottle receptacle hole, pin(30) punctures the cap and water flows into the water cooler through holes(50).

### Summery, Ramifications, and Scope

Accordingly, the water bottle puncturing device of this application offers an article that can be placed on a water cooler of the type that uses water bottles. Then, a water bottle can be placed into the water cooler's bottle receptacle hole without having to remove the cap off it, and the bottle cap puncturing device of this application will puncture the cap allowing water to enter the water cooler.

The reader can see that the bottle puncturing device of this application offers great benefits by allowing the placement of a bottle on a cooler with great ease as well as by preventing water from splattering on and around the water cooler by placing the bottle on the water cooler with its cap removed as is currently done.

The drawings show two of the preferred embodiments of the bottle puncturing device of this application, but it is not limited to those embodiments. The pin can be of many shapes that are sharp enough to puncture a bottle's cap. The whole bottle cap puncturing device of this application can be manufactured as an independent device and attached to a water cooler by any means of attachment or it can be built as an integral part of the water cooler it self.

Thus, the scope of this invention should be determined by the appended claims and their legal equivalents rather than by the examples given.